

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraphs on page 17, lines 26 through page 18, line 10 with the following paragraphs:

In one embodiment, the peptide moiety is a monomeric peptide of 10 to 40 or more amino acid residues in length and having the sequence $X_3X_4X_5GPX_6TWX_7X_8$ (SEQ ID NO: 7) where each amino acid is indicated by standard one letter abbreviation; X_3 is C; X_4 is R, H, L, or W; X_5 is M, F, or I; X_6 is independently selected from any one of the 20 genetically coded L-amino acids; X_7 is D, E, I, L, or V; and X_8 is C, which bind and activate the erythropoietin receptor (EPO-R) or otherwise act as an EPO agonist.

In another embodiment, the peptide moiety is a monomeric peptide of 17 to about 40 amino acids in length that comprise the core amino acid sequence LYACHMGPITX₁VCQPLR (SEQ ID NO: 8), where each amino acid is indicated by standard one letter abbreviation; and X_1 is tryptophan (W), 1-naphthylalanine (1-nal), or 2-naphthylalanine (2-nal).

In yet another embodiment, the peptide moiety comprises one or more TPO-R binding peptides with sequence such as Ac-Ile-Glu-Gly-Pro-Thr-Leu-Arg-Gln-Nal(1)-Leu-Ala-Ala-Arg-Sar (SEQ ID NO: 5), or Ac-Ile-Glu-Gly-Pro-Thr-Leu-Arg-Gln-Trp-Leu-Ala-Ala-Arg-Sar (SEQ ID NO: 6).

Please replace the paragraph on page 38, lines 2-8 with the following paragraph:

The dimeric peptide attached to the spacer, the monomer of which is SEQ ID NO: 1, was mixed with an equal amount (mole basis) of activated PEG species (mPEG-NPC manufactured by NOF Corp., Japan, available through Nektar Therapeutics, U.S., (formerly "Shearwater Corp.)) in dry DMF to afford a clear solution. After 5 minutes, 4 eq. of DIEA was added to above solution. The mixture was stirred at ambient temperature for 14 hrs, followed by purification with C18 reverse phase HPLC. The structure of PEGylated peptide is confirmed by MALDI mass spectrometry.

Please replace the last paragraph on page 42 with the following paragraph:

This trifunctional molecule was used in C-terminus dimerization and PEGylation according to the following reaction scheme (utilizing SEQ ID NO: 2):

Please replace the last paragraph on page 45 with the following paragraph:

This trifunctional molecule was used in N-terminus dimerization and PEGylation according to the following reaction scheme (utilizing SEQ ID NO: 3):

Please replace the last paragraph on page 47 with the following paragraph:

For coupling to the linker, 2 eq peptide is mixed with 1 eq of trifunctional linker in dry DMF to give a clear solution, and 5eq of DIEA is added after 2 minutes. The mixture is stirred at ambient temperature for 14h. The solvent is removed under reduced pressure and the crude product is dissolved in 80% TFA in DCM for 30min to remove the Boc group, followed by purification with C18 reverse phase HPLC. The structure of the dimer is confirmed by electrospray mass spectrometry. This coupling reaction attaches the linker to the nitrogen atom of the ϵ -amino group of the lysine residue of each monomer (SEQ ID NO: 4 in the below reaction scheme).

Please replace the sequence listing with the paper copy included herewith.